

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of)
)
Developing a Unified Intercarrier) CC Docket No. 01-92
Compensation Regime)

**DECLARATION OF
DAVID L. TALBOTT AND JOHN D. SCHELL
ON BEHALF OF AT&T CORP.**

I. QUALIFICATIONS

David L. Talbott

1. My name is David L. Talbott. I am a District Manager for AT&T Local Network Services. In this position, I am responsible for the development and negotiation of interconnection agreements between AT&T and incumbent local exchange carriers, focusing on network interconnection issues. My business address is 3737 Parke Drive, Edgewater, Maryland, 21037.
2. I graduated from the University of Maryland – College Park in 1975 with a Bachelor of Arts Degree from the Communications Department.
3. I started with AT&T Long Lines Department in 1976. From 1979 through 1988, I held various management positions in engineering related to the design and implementation of private line services. From 1988 through 1998, I was responsible for developing and managing numerous business relationships between AT&T and selected Competitive Access Providers and Competitive Local Exchange Carriers. My responsibilities

required that I address and resolve both technical and business issues, including the interconnection of the respective networks.

4. During 1999, I was the Business Development Manager for AT&T's Internet Protocol Cable Telephony Project. My responsibilities included assessing the technical capabilities of selected vendors and contracting with the best qualified vendors to assist AT&T in developing Internet Protocol cable telephony technology.
5. In September 1999, I was assigned to my current position, in which I am responsible for developing and negotiating interconnection agreements between AT&T and ILECs, focusing on network interconnection issues.
6. I have provided testimony before the following entities: the Federal Communications Commission, the California Public Utilities Commission; the Florida Public Service Commission; the Georgia Public Service Commission; the Kansas Corporation Commission; the Michigan Public Service Commission; the New York Public Service Commission; the North Carolina Public Utilities Commission; the Public Utilities Commission of Ohio; the Texas Public Utility Commission; and the Wisconsin Public Service Commission.

B. John D. Schell

7. My name is John D. Schell, Jr. I am a contract employee in the Local Services Access Management group of AT&T Network Services. My business address is 3033 Chain Bridge Road, Oakton, Virginia, 22185.
8. I graduated from St. Louis University with a Bachelor of Science degree in Electrical Engineering in 1965.

9. I joined AT&T Long Lines in 1965 as a Senior Engineer in the Engineering Department in Kansas City, Missouri. After that, I held various line and staff positions in AT&T. For example, from February 1979 to April 1984, I was District Engineer - Transmission for the Eastern Region of AT&T. My district provided technical expertise and guidance for transmission design and maintenance for radio, cable, and fiber transmission systems, switching systems, and special services. From May 1984 to September 1987, I was District Manager-Regulatory Support and provided technical expertise and guidance to Law and Government Affairs on issues related to AT&T's network. From October 1987 through August 1995, I was District Manager-Access Management. My group was responsible for developing and implementing policies and strategies to improve AT&T's ability to compete and to achieve AT&T's access price objectives in the Atlantic States. From September 1995 through January 1998, when I retired from AT&T, I was District Manager-Connectivity Network Planning; my group was responsible for developing AT&T's local market infrastructure plans and managing AT&T's access arrangements with local exchange carriers and competitive access providers in the Atlantic States.
10. From midyear 1983 through 1993, I prepared and presented expert testimony on access charges and interconnection issues. I also provided support, analysis, and testimony in connection with alternative regulation issues and was involved in negotiations and proceedings in all of the original Bell Atlantic states regarding the many issues associated with alternative regulation. While working in that capacity, I have testified in a variety of cases in Maryland, Virginia, West Virginia, Pennsylvania, Delaware, New Jersey, and New York.

11. From March 1998 through May 2001, I was employed by Teligent, Inc. as Manager-National Contracts and was responsible for developing and negotiating Teligent's Master Service Agreements with over 20 national/regional suppliers of local and intercity transport services, including dark fiber. I also managed Teligent's business relationships with such suppliers.
12. In June 2001, I returned to AT&T as a contract employee. Since returning to AT&T, I have appeared on behalf of AT&T in a number of arbitration proceedings pursuant to Section 252 of the Communications Act. In each instance, I testified with regard to network interconnection and related issues.

II. PURPOSE AND SUMMARY OF THIS STATEMENT.

13. Our declaration is in response to comments filed by BellSouth, Qwest, SBC, Sprint, USTA, and Verizon (collectively the "ILEC Commenters"). Specifically, this declaration addresses the following two issues raised in the NRPM in the above captioned proceeding:
 - Which carrier should bear the cost of transport to the POI, and under what circumstances should an interconnecting carrier be able to recover from the other carrier the costs of transport from the POI to the switch serving its end user.¹
 - The use of virtual central office codes (NXXs)² to provide FX-type service and effect on the reciprocal compensation and transport obligations of interconnected LECs.³

¹ *Developing a Unified Inter-carrier Compensation Regime*, Notice of Proposed Rulemaking, 16 FCC Rcd. 9610, ¶ 112 (2001) ("NPRM").

² Virtual NXX codes are central office codes that correspond with a particular geographic area that are assigned to a customer located in a different geographic area.

³ NRPM ¶ 115.

14. Paragraphs 112 through 114 of the NPRM seek comments on fundamental questions regarding the number and location of points of interconnection (“POIs”) and how, or even whether, a given carrier will compensate a second carrier for the transport and termination of traffic originating on the first carrier’s network.
15. It is important to recognize at the outset that neither AT&T nor any other CLEC has yet achieved the volume and density of customers of even the smallest non-rural ILECs such as Southern New England Telephone or Cincinnati Bell Telephone. Obviously, AT&T and other CLECs face enormous challenges in competing with the incumbents, which possess massive numbers of customers and ubiquitous networks. However, the most frequently overlooked competitive advantage that the ILECs possess is that regulators often view their networks as the paradigm of how a local telephone network should look and operate. Regulators should not reasonably expect or require AT&T or any other CLEC to deploy new telephony networks that duplicate the architecture of the incumbent LEC networks. Such a mandate would be economically disastrous for CLECs and would severely hinder the development of local competition. If the ILECs were to rebuild their networks from a clean slate, they would likely not deploy the same network architecture today. Rather, they would develop an architecture that takes advantage of the costs and benefits of the latest switching and transport technology. Yet certain ILEC Commenters have asked the Commission effectively to codify their traditional local telephony architecture for purposes of determining how emerging networks should interconnect with their networks. The Commission should avoid relying upon this traditional local telephony paradigm and, instead, should reaffirm its existing policies and rules that

accommodate the substantially different strategies, network designs, and economic constraints of CLECs in order to promote the development of a healthy, efficient competitive environment. Relaxing or revising these rules would only further entrench the incumbents' positions in the marketplace.

16. The virtual NXX code issue implicates the question of how the Commission and state regulators should treat a call when at least one party to the call is physically located outside of the calling area of the exchange to which that customer is assigned a number. This occurs, for example, when a customer subscribes to a foreign exchange (or an "FX" service) provided by an ILEC or a FX-type service provided by a CLEC. The regulatory treatment of such calls should continue to be determined, as it has been in the past, by the NPA-NXX of the calling and called numbers.
17. Indeed, the ILECs' comments reveal that their opposition to CLEC FX-type services is based, not on sound policy, but on the desire to enlist the Commission to protect their FX services from competition. In all events, a review of the facts shows that CLEC FX-type service is a local service, not a toll service as the ILECs allege, and that the ILECs' advocacy regarding treatment of calls to or from the CLEC's FX-type services is both self-serving and inconsistent with how the CLECs treat their own FX calls. The Commission should promote competition by reaffirming that the regulatory treatment of ILEC FX and CLEC FX-type calls should be determined by the NPA-NXX of the calling and called numbers.

III. FACILITIES-BASED LOCAL COMPETITION WOULD BE SUBSTANTIALLY HARMED IF THE COMMISSION DOES NOT HOLD FAST TO ITS CURRENT RULES PRESCRIBING THE ESTABLISHMENT OF POINTS OF INTERCONNECTION AND ALLOCATION OF INTERCONNECTION COSTS BETWEEN LECs.

18. The ILEC Commenters seek changes to the current Commission rules⁴ obligating a LEC to bear the costs of carrying traffic originating on its network to the POI of the terminating LEC and to compensate the terminating LEC for any transport and termination provided by the terminating LEC. The ILECs want the rules changed in order to insulate them from the costs of competition, by shifting the entire cost of that competition to their competitors – who, in the eyes of the ILECs, have “caused” these costs through adoption of differing network architectures – rather than a proportional allocation of interconnection costs, as the current rules provide. In the ILECs’ view, the traditional telephony paradigm (namely, their outdated network architecture) compels such a result, overriding the law and sound public policy.
19. ILEC networks have been deployed over the past hundred years to provide ubiquitous service across their certificated territories. We would describe these networks as a multi-layer or tiered network. This hierarchical or layered network was deployed when there were significant distance limitations on local loop technology, resulting in many switches deployed in the neighborhoods. Therefore, ILECs have many end office switches spread out over their service area, installed in the neighborhoods populated by their customers. These end office switches are interconnected by an overlaying network of tandem switches. When certain volume levels are achieved and it is cost effective, the ILEC

⁴ 47 C.F.R. § 51.7013(c); *id.* § 51.7013(d); *id.* § 51.7013(e); *id.* § 51.703(b); *id.* § 51.709(b).

establishes high usage trunk groups that directly link end office switches (bypassing the tandems). This typical ILEC switch-intensive network architecture is depicted in Exhibit 1 to our affidavit. ILECs find the use of tandem switches to be the least costly method of interconnecting their end offices – until certain traffic thresholds are achieved between two end offices, such that it is then more efficient for ILECs to install direct links between the two end offices.

20. Facilities-based CLECs, such as AT&T, which enter a market with few or no customers, are faced with the considerable challenge of how and where it is profitable to deploy transport facilities and switching systems, given the relatively low density of customers and traffic volume forecasted over the planning period. One area of technological advancement that has made facilities-based market entry a possibility is the increased availability of high-capacity fiber-optic facility systems. Accordingly, AT&T's (and other CLECs') local networks are deployed to take advantage of the efficiencies of today's transport technology, by substituting transport for switching. This is the most efficient network architecture for a CLEC, such as AT&T, even considering the expense and difficulties associated with the deployment of local fiber optic transport systems. This transport-intensive architecture allows AT&T (and other CLECs) to reduce somewhat the negative economics associated with deploying a network for an initially small customer base.
21. The need for CLECs to substitute transport for switching is particularly acute given the very high initial cost of switching platforms as compared to the relatively lower incremental cost of high-capacity facility systems. In fact, even where AT&T has

determined the need for multiple switches within a LATA, they are often collocated within the same building to reduce real estate costs and to rely upon centralized technical staff. AT&T's typical network architecture (which is the network architecture typically used by most CLECs) is depicted in Exhibit 2 to our declaration.

22. As we will explain in more detail below, the ILEC Commenters are asking the Commission to require CLECs to adapt unilaterally their transport-intensive network design to the ILECs' switch-intensive network design. These proposals would result in AT&T and other CLECs losing the benefits of efficient network architecture and incurring higher network costs. Also, the ILECs' proposals to change the Commission's current rules would shift to CLECs the transport costs that the Communications Act requires ILECs to bear. By contrast, the Commission's current rules are properly neutral to network design in that they require each party - regardless of network design - to be responsible for all of the costs of its own originating traffic.
23. In order to address this issue adequately, it is necessary to clarify certain definitions relating to the Point of Interconnection ("POI"), interconnection, and reciprocal compensation. If these terms are not appropriately defined, then the rights and obligations associated with transporting traffic between the two networks cannot be understood. Interconnection and the POI are integrally related to the issue of transport obligations. Interconnection is the physical linking of two networks for the mutual exchange of traffic. *Implementation of the Local Competition Provision in the Telecommunications Act of 1996*, First Report and Order, 11 FCC Rcd. 15499, ¶¶ 172,

176 (1996) (“*Local Competition Order*”). The POI, is the *location* where the parties exchange their traffic.

24. The originating carrier can bring its traffic to a POI for interconnection in a variety of ways. It can provide the facilities itself, lease interconnection facilities from third parties, or lease interconnection facilities from the terminating carrier. In any event, the leased facilities are part of the originating carrier’s network and the POI is still the point at which the two networks are interconnected for the exchange of traffic.
25. Each carrier is responsible for delivering its originating traffic to the POI. Between the originating customer and the POI, the costs of delivery are identified as the origination costs, and the facilities that bring the traffic to that point are the interconnection facilities.⁵ From the POI to the terminating customer, the other carrier must assume operational responsibility to take that traffic to the designated end user and the originating carrier must pay the terminating carrier for the costs of that carriage. The costs associated with the terminating side of the POI are generally known as the termination costs. If the call is local, the originating carrier compensates the terminating carrier for that delivery pursuant to reciprocal compensation obligations which are governed by Section 251(b)(5) of the Communications Act.⁶ If the call is not local, then

⁵ Interconnection facilities are the physical transmission channels that transport traffic between the AT&T and ILEC switches that are used for local and intraLATA toll traffic.

⁶ Reciprocal compensation consists of two parts – the transport portion (*i.e.*, transmission and any necessary tandem switching from the POI to the terminating carrier’s end office switch directly serving the called party) and the termination portion (*i.e.*, the switching of the traffic at the terminating carrier’s end office switch or equivalent facility and delivery of that traffic to the called party’s premises). *See* 47 C.F.R. §§ 51.701(c), (d).

access charges rather than reciprocal compensation charges apply. Thus, by selecting a particular POI location, a carrier affects the amount of reciprocal compensation it pays the other party and its own network costs.

26. Consistent with the Communications Act, the Commission's rules provide that new entrants may interconnect at any technically feasible point. 47 C.F.R. § 51.305(a)(2). Further, Section 251(c)(2) gives the CLEC the right to select where it wants to interconnect, a right which enables it to establish, if it wishes, only one POI per LATA. This rule and policy allows a CLEC to deploy a single switch per LATA and, therefore, enables new entrants to grow their business economically without having to duplicate the ILEC's existing network. In other words, the right of a CLEC to choose its interconnection points furthers the pro-competitive objective of the Act by allowing CLECs to choose among the most economically efficient means of interconnection, and, in particular, allowing CLECs to reduce their cost of transport and termination.
27. The Commission's regulations and decisions also require that the costs of interconnection facilities are to be borne by the originating carrier. *See* 47 C.F.R. § 51.703(b); *id.* § 51.709(b). *See also Local Competition Order* ¶ 1062. This, in turn, provides CLECs with the incentive to establish multiple POIs when it is efficient to do so. *Id.* ¶ 209.
28. The ILEC Commenters brush aside these basic tenets of interconnection that have been affirmed by both state commissions and the Commission and, instead, ask the Commission to use "default" arrangements that would (1) enable the ILEC, rather than the CLEC, to select the POIs, and (2) transfer a substantial amount of the ILECs'

origination and termination costs to the CLEC. *See* SBC at 18; Qwest at 28; Verizon at 16. The Commission should squarely reject these proposals.

29. The ILECs' arguments are based on the logical fallacy that their proposals are necessary to prevent their subscribers from having to pay for the design of the CLEC network. *See, e.g.,* Sprint at 2, 11; Verizon at 3-8. In particular, falling back on the traditional telephony paradigm, the ILEC Commenters portray this issue as one "caused" by the CLEC and its local network design. That characterization is a biased view of the issue and entirely misses the point. ILECs' networks and the CLEC networks are configured differently, yet must still interconnect to serve a similar geographic base of customers. Those differences, therefore, are not "caused" by the CLEC. Indeed, in this vein it is just as easy, and correct, to say that those differences are "caused" by the ILECs, because ILECs chose to design *their* local networks different than the CLECs' networks. However, it is entirely inappropriate to look at this issue from the perspective of either ILECs' or CLECs' networks. Neither network should be logically viewed as the "correct," "baseline," or "primary" network. Nor is it appropriate to conclude that any one network imposes interconnection costs on the other network. Rather, it is the interconnection of *both* networks to one another that creates additional costs that neither would bear if the networks were not required to interconnect with one another.
30. In addition, calling again upon the traditional telephony architecture, the ILEC Commenters support their proposals with the argument that they should not be required to transport their local calls beyond their local calling area. *See* SBC at 17; Sprint at 31, Verizon at 10-11. In particular, the ILEC Commenters identify their local calling areas

as the demarcation point that should define the limits of their interconnection transport obligations. But ILEC local calling areas are not and should not be the basis for defining network interconnection and where a carrier's financial responsibility for carrying traffic ends.

31. There is no logical, economic, or technical reason to use ILECs' legacy local calling areas to define the basis of network interconnection and the division of financial responsibility between carriers. ILECs' local calling areas are an artifact of a monopoly era and ILECs' network structures as they evolved over time. Over the past century, local calling areas have been developed and modified around the then-current technology and the corresponding network capabilities that ILECs were able to deploy. As modern electronic switches replaced cord switchboards and mechanical switching and as the cost of transport decreased, local calling areas have generally evolved to encompass larger geographical areas. Today's broad geographic coverage of AT&T's local switches simply does not correspond to any ILECs' legacy network architecture. Further, ILEC local calling areas are now used principally for the purpose of setting certain local rates for their own customers.
32. Moreover, a single local calling area is generally a thing of the past, at least in terms of its original significance. Originally, the local calling area was the one and only geographic area within which an end user customer could make local calls. Anything beyond that area was considered a toll call. But this is no longer the case. For some time, ILECs have offered expanded local calling area plans, and in many areas of the country offer essentially LATA-wide local calling. The existence of these various calling

plan options further dispels any suggestion that there is any economic or technical significance to the geographic scope of any given local calling area. Rather, the existence of multiple plans for local calling suggests that, today, the true significance of these geographic areas is as marketing tools to sell different services. Given that these local calling areas are basically marketing tools, one can expect that ILECs' local calling areas may be subject to substantial changes as ILECs (and their competitors) seek competitive advantages for their respective local service offerings. To have ILEC marketing decisions dictate the foundation of CLEC interconnection requirements is wholly inappropriate.

33. More fundamentally, however, interconnection based solely on ILECs' local calling areas does not foster competition or benefit consumers. To establish interconnection based on the ILECs' local calling areas would discourage competitors from expanding their own local calling areas for the benefit of customers and competition. Moreover, using ILECs' local calling areas as the basis for POI locations and financial responsibility substantially compromises the network efficiencies of the alternative network architectures deployed by CLECs that we described above, forces CLECs into an inefficient ILEC-look-a-like interconnection arrangement, and forces the customers of CLECs to bear the burden of those inefficiencies.
34. Although the ILEC Commenters claim that they accept a CLEC's legal right to designate a point of interconnection, the compensation elements of the ILEC Commenters' proposals essentially eliminate that right. They propose forcing CLECs to be financially responsible for picking up the ILECs' traffic at some point in each ILEC legacy local

calling area and for transporting that traffic to the CLEC's point of interconnection in the LATA. This proposal would render the CLEC's chosen interconnection points meaningless. A CLEC derives no benefit from its right to designate interconnection points unless they serve their intended purpose which is to delineate the boundary between the originating carrier's network and payment of reciprocal compensation to the terminating carrier for completing the call. By agreeing that a CLEC may interconnect at a chosen point in a LATA, the ILECs know they offer nothing more than the sleeves off their vests because they require the CLEC to pay the cost of transporting the ILECs' own originating traffic from the boundaries of their basic local calling areas to the point of interconnection designated by CLEC.

35. It is a hollow gesture to allow a CLEC to designate a single POI and then require the CLEC to pay the difference of the cost of that single POI and the cost of multiple POIs in every ILECs basic local calling area. The ILEC Commenters' proposals would effectively eliminate a CLEC's right to designate a single point of interconnection, because it would force the CLEC to pay the ILECs *as if* the CLEC were required to establish multiple points of interconnection in all of ILECs' basic local calling areas. Such multiple POIs would significantly increase CLEC interconnection costs because they would result in significant under utilization of a CLEC's network. The smallest transport unit currently used in the design of the AT&T's and many other CLEC networks is a DS-3 facility (*i.e.*, the smallest POI AT&T currently chooses to deploys is a DS-3 interface, which may carry up to 672 trunks). CLECs simply do not exchange a

sufficient volume of traffic to efficiently use a DS-3 interface in each ILEC basic local calling area.⁷

36. Indeed, the competition-foreclosing impact of the ILEC POI proposals can be directly quantified. AT&T has studied the cost of implementing the interconnection transport arrangements which BellSouth and Verizon proposed to their respective state commissions in recent interconnection agreement arbitrations in Florida, Georgia, and Virginia. The results of the study show that the ILECs' proposals would raise AT&T's interconnection costs by over 400 to 800%.⁸
37. These additional interconnection costs to AT&T cannot be viewed in isolation. ILECs and AT&T are not similarly situated carriers. RBOC are incumbent carriers with a 90%-plus market share.⁹ All the other CLECs share the remaining small percentage of market

⁷ By way of example, MediaOne, which offers residential local services in the Richmond, Virginia area, has the need today for 72 interconnection trunks to the Ashland and Petersburg Verizon local calling areas. Requiring a POI in each of these local calling areas, as Verizon proposes, would result in 600 trunks of spare capacity (672 minus 72) to each of these areas – a utilization rate of only 10.7 percent.

⁸ To develop these costs, we used the following methodology. First, we used traffic usage reports to determine the number of interconnection trunks in place today between AT&T's switches and ILECs' tandems and end offices. Trunks were allocated to the appropriate party based on traffic direction. We then determined the fewest number of DS-1 and DS-3 facilities needed to cost-efficiently carry the applicable number of trunks between each office. The cost of the transport for in-place trunk groups to the end offices and tandems was then calculated based on the number of DS-1 or DS-3 circuits and the miles between the switches based on the V&H data in the Local Exchange Routing Guide ("LERG"). Current UNE transport rates were used to determine the costs to each party. This yielded the cost of the transport in-place today between AT&T's switches and the ILEC's end office and tandem switches. We then calculated the cost of replacing the trunk groups to tandem switches with trunk groups to the end office switches subtending the tandem switches. In addition, we applied a growth factor to the usage data that allowed us to price out the impact of ILEC's proposal in years 2 through 5.

⁹ COMMISSION News, May 21, 2001, Table 6.

share. Obviously, the effect of an increase in interconnection costs on AT&T will be significantly different than the effect on ILECs. Thus, the ILEC's interconnection costs under AT&T's proposal would be only slightly higher than under their own proposals. On the other hand, as noted, AT&T's costs under the ILECs' proposal would be four to eight times higher. The higher costs that AT&T would be forced to bear under the ILECs' proposal would make it uneconomic for AT&T to serve many local markets that would have been marginally profitable under AT&T's interconnection proposal. If the Commission is going to encourage local competition, it must enforce both the Act and its existing rules providing for the equitable allocation of interconnection expenses between the parties.

38. Worse yet, most, if not all, of the additional costs imposed on AT&T by the ILECs' POI proposals would translate directly into additional ILEC transport revenues, because AT&T would have little choice but to obtain transport facilities from the ILECs. Thus, not only would the ILECs' proposals increase AT&T's own costs, it would do so in a way that boosts the ILECs' revenues. This type of "double blow" would only further serve to suppress investment in competitive facilities and to strengthen the ILECs' place as monopoly providers.
39. In stark contrast, ILEC Commenters' complaints that they are forced to haul local traffic absurdly long distances to CLECs' POIs is a gross exaggeration. Tellingly, not a single ILEC Commenter provided any evidence to support this assertion. Nor could they. As concluded by the Commission, "because competing carriers must usually compensate incumbent LECs for the additional costs incurred by providing interconnection,

competitors have an incentive to make economically efficient decisions about where to interconnect.”¹⁰ This has proven to be true. Across Virginia’s seven LATAs, including four rural LATAs, where AT&T’s TCG subsidiary offers local services, TCG has established 13 POIs. Among the four rural LATAs in Virginia, TCG has six POIs. In the Dallas, Texas LATA, AT&T has proposed to SBC that the parties interconnect at 12 POIs, notwithstanding the Texas PUC’s order allowing AT&T a single POI in the LATA. SBC is not satisfied with 12 POIs and continues to demand that the parties interconnection at a POI in each SBC mandatory local calling area.

40. Sprint’s “compromise” proposal is not a viable alternative either. Sprint at 31. First, Sprint’s proposal is based on Sprint’s local calling areas. As we have previously described, it is wholly inappropriate to base competitive network interconnection and allocation of interconnection costs on a monopoly artifice, like ILEC local calling areas. Second, Sprint’s proposal removes any discretion the CLEC would have to determine the most efficient network design for its business plan, thereby eviscerating the CLEC’s right under Section 251(b)(2) of the Act to interconnect at any technically feasible point on the ILEC’s network. Third, Sprint’s proposal is contrary to Section 252(d)(2) of the Act, as it would preclude the CLEC’s ability to recover its costs associated with the transport of traffic originating on the ILEC’s network.
41. In sum, sound public policy compels the Commission to reaffirm its current rules that the responsibility for originating, transporting, and terminating traffic is mutual, such that each party is financially responsible for transporting its own originating traffic to the POI

¹⁰ *Local Competition Order* at ¶ 209.

on the terminating party's network and for paying for any transport and termination used to complete the traffic. As we have explained, the existing rules give the newer, smaller CLECs – who need to conserve dollars more than do the ILECs – the opportunity to minimize their costs and increase their efficiencies. Providing CLECs with this opportunity recognizes the extreme economic disadvantages that the CLECs face in attempting to break into an incumbent's market while, at the same time, having to rely on the incumbent for some essential services. Moreover, it cannot be forgotten that ILECs retain the vast majority of end users and the revenue that these customers produce – in which is quite a significant advantage. Allowing the CLEC to identify the locations for exchange of traffic will slightly level the playing field and assist in the development of a competitive market. It is not only fair, but it is absolutely necessary, a point already noted by the Commission in its *Local Competition Order*:

42. Because an incumbent LEC currently serves virtually all subscribers in its local serving area, an incumbent LEC has little economic incentive to assist new entrants in their efforts to secure a greater share of that market. An incumbent LEC also has the ability to act on its incentive to discourage entry and robust competition by not interconnecting its network with the new entrant's network or by insisting on supracompetitive prices or other unreasonable conditions for terminating calls from the entrant's customers to the incumbent LEC's subscribers.¹¹

IV. COMPETITION IS TAKING ROOT FOR LOCAL EXCHANGE FX SERVICES AND THE COMMISSION SHOULD NOT CHOOSE WINNERS AND LOSERS BY ESTABLISHING LIMITS ON THE USE OF VIRTUAL NXX CODES OR

¹¹ See *Local Competition Order* at ¶ 10.

ALTERING THE CURRENT INTERCONNECTION RULES FOR THESE SERVICES.

43. The virtual NNX codes issue addresses what regulatory treatment a call should receive when a party to the call is physically located outside of the calling area of the exchange to which that customer is assigned a number. This occurs, for example, when one or both customers subscribe to an FX service provided by an ILEC or to an FX-type service provided by a CLEC. The treatment of such calls should continue to be determined by the NPA-NXX of the calling and called numbers.
44. The ILECs, however, argue that CLECs should not be permitted to provide FX-type services. For example, Verizon asserts that “some LECs are misusing telephone numbers to make toll calls look like direct dial local calls” and that such “misuse of numbers . . . deprives the originating carrier of toll or access revenues.” Verizon at 4. Verizon further claims that the “Commission should make it clear that these arrangements are unlawful.” *Id.* SBC asserts that “[w]hen the ILEC’s end users call a CLEC end user who is served by a ‘virtual FX’ arrangement, they are able to bypass applicable toll charges.” SBC at 17. SBC says the “Commission should *immediately* issue a clarification that a CLEC may not offer its customers an arrangement that reclassifies ILEC long distance as local calls, unless the CLEC provides the transport between the calling party’s network and its POI or pays any applicable toll charges.” *Id.* The ILECs’ real complaint, however, is that competition between ILEC FX and CLEC FX-type services is taking root – and that ILECs are experiencing competitive losses. Rather than ask the Commission to prohibit CLECs from offering FX-type services that compete with their services, the ILECs should respond competitively in the marketplace.

45. In particular, Verizon and SBC seek to treat calls as toll calls (and, thereby, to collect access charges) whenever their customer dials a number in a CLEC-assigned NPA-NXX in the customer's own legacy ILEC rate center, and the CLEC picks up that call in the ILEC's rate center and routes that call to a CLEC customer, who happens to be located in a different legacy ILEC rate center.. Of course, the situation would be the same when the call flow is reversed, in which case the CLEC would pay the ILEC terminating access charges. The ILECs apparently base their claim that such calls should be treated as toll calls on the fact that under *their* [T]ariffs such calls would be toll calls *in the absence of the CLEC's network and FX-type service*, such that the ILEC would collect toll revenues if it handled the call, or originating or terminating access charges if another carrier handled the call. Here again, the ILECs use the traditional telephony architecture as a baseline. Based on this logical fallacy, the ILECs assert that such calls are interexchange calls, not "local" calls and, therefore, are subject to access charges, rather than local reciprocal compensation.
46. Although CLECs are free to develop whatever local calling areas they choose for their customers, the ILECs' proposals, if adopted by the Commission, would exert significant economic pressure on CLECs to conform to the ILECs' local calling areas by imposing a financial penalty on the CLECs when they offer a service that does not mirror the ILEC's own local calling areas. As discussed above, replication of the ILECs' networks would be prohibitively expensive and inefficient for CLECs and is not in the public interest. The ILEC's legacy local calling areas are an artifact of a monopoly era and of the ILEC's network architecture as it evolved over time. Implementing decisions that effectively

require the adoption of legacy local calling areas by emerging competitors limits the flexibility of the CLEC to leverage its efficient network design for the benefit of consumers. The Commission should not restrict competition by limiting customers choices based on legacy local calling areas, but rather should allow technology, network efficiencies, and market forces to determine what and how CLEC services should be offered.

47. Traditional FX service, which is offered by ILECs, involves the provision of local dial tone to a customer from a remote local switch – that is, a switch other than the switch from which the customer would ordinarily receive local dial tone. Verizon, for example, offers FX service as an exchange service in its Local Exchange Service Tariff. In the tariff, Verizon provides the following definition: “Foreign Exchange Service is exchange service furnished from one exchange to a location in another exchange by use of Series 2000, type 2006A, Channels.”¹² Verizon’s tariff also states: “The long distance and local message charges and the extent of local service applicable, are the same as apply to other Local Exchange Services provided from the same foreign exchange.”¹³ Thus, when a Verizon customer dials a number assigned to a rate center within the customer’s local calling area and Verizon routes that call to a Verizon FX customer who happens to be located in a different legacy Verizon rate center in a different local calling area, Verizon

¹² Verizon Virginia, Inc., Local Exchange Services Tariff, S.C.C.–Va.–No. 202, Original Page 2, ¶ B(4)(a). This same language has been in the Tariffs filed by Verizon’s predecessor, Bell Atlantic – Virginia, Inc. since at least 1995. *Id.* at ¶ B(4)(a)(6).

¹³ *Id.*

treats this call as a local call, not as a toll call. That is, the Verizon end user that originated the call pays Verizon's local charges for that call.

48. An FX arrangement simply allows a customer to be assigned a telephone number and to make or receive calls as if he or she was located in a given exchange, regardless of the physical location of the customer. In the ILECs' networks, this is accomplished via the provision of remote dial tone. That is, the FX subscriber is provided dial tone from the foreign switch (*i.e.*, the distant or foreign rate center) via an interoffice private line facility connecting the foreign switch to the customer's native serving wire center (*i.e.*, the home rate center). Thus, for example, Verizon's FX customer would pay Verizon for the dial-tone line and monthly fixed and per-mile charges for the dedicated interexchange private line facility.
49. CLECs offer their customers an FX-type local service that provides their customers with similar benefits to the ILECs' FX service. Specifically, the CLECs' FX-type service provides customers with the ability to be assigned a telephone number in a location that is different from the customer's actual location. Because the CLECs employ a different network architecture, the CLEC's FX-type service configuration is distinct from the ILECs' FX configuration. And because the NPA-NXXs assigned to the CLEC reside in the same switch (wire center) that serves the CLEC's FX customer, the CLEC does not require a private line arrangement to connect two separate wire centers, one serving the customer and one serving the desired NPA-NXX. Thus, the key difference between the ILECs' FX service and the CLECs' FX-type service is that the ILECs' traditional FX

service uses a dedicated interoffice transport facility and a local portion (the dial-tone line), whereas the CLECs' FX-type service has only a local portion.

50. This distinction is important since the definition of traditional FX service is the provision of dial tone from a foreign switch or exchange. In AT&T's network (and those of other CLECs), dial tone is provided by the customer's native switch, not a foreign switch. AT&T's switch serves a much broader geographic area than do the ILECs' individual local switches and, therefore, AT&T is able to terminate traffic to customers within different ILEC legacy rate centers in different local calling areas at comparable cost. Hence, from the perspective of AT&T's network, there is no difference in function or cost to terminate a call in one rate center versus another, and thus AT&T offers this service at no additional charge to the customer as part of its local service offering. This is an important distinction because the Act defines telephone toll service as follows:

The term "telephone toll service" means telephone service between stations in different exchange areas for which there is made a separate charge not included in contracts with subscribers for exchange service.¹⁴

Thus, despite the ILEC Commenters' assertions to the contrary, AT&T's FX-type service is not a toll service, as defined in the Act.

51. Moreover, the ILECs' costs to deliver a call to AT&T do not vary depending on whether the call is destined to a customer in the calling party's native rate center or a customer in a foreign rate center. The cost to the ILEC is *exactly* the same. This is true because the ILEC delivers all traffic bound to the same AT&T NPA-NXX to the same AT&T POI.

In other words, AT&T specifies a single POI for an NPA-NXX, regardless of the physical location of the AT&T terminating customer. Because the POI to which the ILEC delivers the traffic is the same, the ILEC's network costs to deliver traffic to that POI are necessarily the same. Where there are any additional costs between AT&T's switch and the customer to complete such traffic, such costs are borne by AT&T. Thus, from the standpoint of reciprocal compensation, the ILEC should be financially indifferent as to where calls are terminated within AT&T's network, since the physical location of the customer does not affect the rates the ILEC pays for transport and termination of the calls.

52. Nonetheless, Verizon complains (at 4) that CLECs' FX-type services "deprive the originating carrier of toll or access revenues" Thus, in the absence of a CLEC's FX-type service, Verizon claims that it would collect toll charges if it handled the call or originating access charges if another carrier handled the call. Or if the FX customer were a Verizon customer, Verizon would charge the FX customer the cost of interexchange access. Said another way, in the absence of competition, Verizon would have all of the revenue.

53. Thus, it is clear that this issue is really about the ILEC being made whole for *competitive losses* it is suffering due to CLECs providing FX-type service. The ILECs are attempting to cut their losses by relying on a regulatory artifice relating to the incumbent's legacy local calling areas that even the ILECs do not abide by when it is to their advantage.

(continued . . .)

¹⁴ 47 U.S.C. § 153(48).

While an ILEC's revenues may well be affected by the CLEC's service offerings, that impact is a result of competition and the ILEC should respond in the marketplace with its own competitive offering, rather than attempting to stifle the CLEC's competitive product through the application of unreasonable anticompetitive conditions.

54. The Commission should note that Verizon's advocacy on this issue is completely inconsistent with the manner in which the industry, including Verizon, rates calls to FX customers today. *Verizon rates its FX calls as local or toll based on the customer's selected (foreign) rate center NPA-NXX, not on the physical location of the customer.* If the NPA-NXX of the FX customer is located in the same local calling area as the calling or called party, Verizon treats that call as local. This is true whether the calls are from customers served by Verizon, a CLEC, or an independent telephone company. This convention has always been used by the industry for billing purposes and is embedded in the call rating and billing software.
55. To see how disingenuous Verizon's advocacy on this issue is, one need only consider a simple example. Today, if Verizon has a customer in Staunton, VA that desires a Roanoke, Virginia telephone number, Verizon will provide the Staunton customer FX service to Roanoke. Verizon will rate all calls from within Roanoke's local calling area to the Staunton FX customer as local calls. On the other hand, if a CLEC is successful in competing with Verizon and converts Verizon's Staunton FX customer to a CLEC FX-type customer with a Roanoke NPA-NXX, Verizon claims that all of the same calls from within Roanoke's local calling area to the very same Staunton FX-type customer are now toll calls. Verizon cannot have it both ways. Following the practice that Verizon has had

in place for many years, the NPA-NXX of the CLEC's FX-type customer, not the physical location of the customer, should be used to rate the calls.

56. The ILECs' proposals are also contrary to the very nature of the calling-party's-network pays ("CPNP") regime. The fundamental principle of the CPNP regime is that the party collecting the revenue for a call (*i.e.*, the originating party in the case of local exchange service) compensates the other party for the use of its network. CLECs, therefore, are lawfully entitled to recover their costs of terminating local exchange traffic originating on Verizon's network. However, Verizon's position that CLECs should compensate Verizon in the form of access charges for FX-type traffic when, in fact, Verizon is collecting the revenue for these calls turns the current CPNP regime on its head. There is simply no basis for the Commission to order that CLEC's FX-type traffic should be an exception to the CPNP regime. The Commission should come to the only rational conclusion, that CLEC's FX-type traffic should be compensated in the same manner as all telecommunications traffic (other than exchange access and information access traffic).¹⁵

¹⁵ To be sure, if the Commission were to adopt a COBAK regime for all traffic, the virtual NXX code issue would effectively go away. All LECs would be financially responsible for delivering their originating traffic to the POI and each LEC would be financially responsible for picking-up its terminating traffic at the POI and delivering such traffic to its customers. There would be no difference between local and toll traffic. On the other hand, if the Commission adopts bill and keep for local traffic only, it would still need to address the jurisdiction [??] of ILEC FX and CLEC FX-type calls. The Commission should find that the jurisdiction [??] of ILEC FX and CLEC FX-type calls should continue to be determined by the industry, as it has in the past, by the NPA-NXX of the calling and called numbers. Also, the Commission should find that AT&T's FX-type service is a local service and, as explained above, not a toll service as such service is defined in the Act.

57. Finally, the ILECs' proposals would require a fundamental change in the way calls to ILEC FX services are rated. That is, if the Commission accepts Verizon's assertion that *physical location* of the caller and called parties are the appropriate determinant of the regulatory treatment of a call, then the same determinant should be applied uniformly to the rating of *all* calls – not just to a subset favorable to the ILECs. Such change would have a major impact on the entire industry and would impact the call rating and billing systems used by ILECs, CLECs, and independent telephone companies. For example, for FX service, calls within the local calling area of the foreign exchange NPA-NXX telephone number would have to be treated as toll calls, including the application of originating or terminating switched access charges, as applicable. Calls between the foreign exchange NPA-NXX telephone number and customers in the local calling area where the FX customer is physically located would have to be treated as local – not toll – calls, and would require special processing by the carriers to avoid the application of originating or terminating switched access charges that would otherwise be applicable to calls between such NPA-NXXs.
58. All of this special handling would have to be done on a ten-digit basis, not the traditional NPA-NXX six-digit basis. This would be a costly endeavor with no public benefit. Moreover, the rating of other calls, including call forwarding-type services, would also have to change to be consistent with use of the *physical locations* of the calling and called parties to determine the jurisdiction of a call.
59. The current industry standard method for rating and billing calls between carriers is based on the NPA-NXX of the originating and terminating telephone numbers. Each

carrier records the originating and terminating telephone numbers on its call records and uses this information in its downstream call rating and billing processes. This ability is built into all of the carriers' systems and the details are fleshed out in interconnection agreements.

60. If the industry changes to using the physical locations of the caller and called party to determine the jurisdiction of a call, the industry will need to come up with a way to exchange data identifying all FX and FX-type telephone numbers, including the NPA-NXX geographically associated with the physical location of the FX customer. The industry would need to exchange this data because each carrier needs this information to determine when to bill access charges versus reciprocal compensation for calls between its subscribers and other LECs FX or FX-type customers. The carrier no longer has all of the required billing information within its call records. This information would need to be exchanged frequently, if not daily, to maintain its accuracy.
61. This would create a requirement for CLECs and ILECs to identify separately and to track FX and FX-type traffic. Today, neither AT&T nor, to our knowledge, any other CLEC identifies or maintains a record of FX-type subscribers, and FX-type traffic is not segregated or tracked separately. AT&T and other CLECs would have to identify their FX-type customers by comparing each of their customer's physical addresses and assigned telephone numbers to the NPA-NXXs associated with the customer's physical location. The combination of the customer's address and telephone number is not available in the Carrier Access Billing System ("CABS"), but would have to be obtained from the End User Billing System. Once the FX-type customers are identified, CLECs

would need to create a table of FX-type telephone numbers, the customer's physical address associated with each number, and a cross reference to a surrogate telephone number with a NPA-NXX associated with the customer's physical location. The surrogate number would be used in the call rating and billing process instead of the customer's actual telephone number to determine if the calls are local or toll.

62. AT&T and other CLECs would have to modify their End User Billing System to provide the necessary data for its FX-type customers and would have to modify their call rating and billing systems to incorporate and process the ILEC FX and CLEC FX-type data. Although AT&T has not engaged in a detailed financial analysis, AT&T developed an estimate for these billing changes in Texas (Docket No. 24015). That record shows that AT&T's estimated one-time cost for development of systems would be approximately \$3 to \$4 million, plus as much as \$0.5 million per month for additional maintenance/processing costs.

V. CONCLUSION

63. The ILEC Commenters' proposals to revise current interconnection rules would substantially harm the development of local competition. AT&T has proposed, and our declaration explains, that the interconnection arrangement should be neutral to either party's network architecture (*i.e.*, each party should have the same relative obligations when it is in the role of originating carrier) and should require each party to bear the costs to transport and terminate its own traffic. The Commission should therefore reaffirm its current rules which provide the CLEC the right determine the location and method of

interconnection to ILEC networks, obligate each party to bring its traffic to the POI and to pay for any transport needed to carry such traffic to the terminating party's switch.

64. With respect to the ILEC Commenters proposals on the use of virtual NXX codes, we have shown that the ILECs are simply looking for the Commission to insulate them from the effects of legitimate competition. Their shrill objections to FX-type services are really about revenue lost to legitimate competition. The CLECs' use of virtual NXX codes are neither "fraudulent" nor constitute a "theft of service scheme," Verizon at 4, but actually mirror the ILEC's own FX service arrangement, albeit through the use of an alternative network design. The Commission should make clear to the ILECs that they must respond to the CLECs with a competitive FX offering, rather than seek artificial regulatory protection.